Aggregate Wage Indicators, Enterprise Bargaining and Recent Wage Increases

John Burgess*

Abstract

To what extent have wages recently increased in Australia? Have these increases been excessive? There are a myriad of wage data series produced by the Australian Bureau of Statistics. These series reflect different questions and different perspectives about wages. In the context of the previously centralised wage determination process the dissection and analysis of aggregate wage series was an important exercise for industry and academic economists. However, the analysis and interpretation of aggregate wage data has become more difficult in the light of a number of developments: (a) falling award coverage, (b) the development and uneven spread of enterprise bargaining, (c) the industrial and demographic restructuring of the workforce, (d) the growth in non-wage benefits, (e) the growth in non-standard employment. What are the available options for measuring aggregate wages growth in the light of these above developments? To what extent has recent wage growth been excessive?

The Recent Concern About Excessive Wage Increases

There has recently been a spate of newspaper headlines and editorial warnings about wages. From these it seems that the ACTU has reneged on its promise under Accord Mark 8 to bargain for wage increases that are

^{*} Department of Economics University of Newcastle. This paper was presented at the 1995 Australian Social Research Conference, La Trobe University.

compatible with a low and sustainable rate of inflation (around 2-3 percent per year). To the June quarter of this year average weekly earnings had increased by around five percent; the reaction from the media experts was swift and predictable:

'It would not be difficult to find a Reserve Bank or treasury official who is worried about the pace of wages growth at present' (Henderson 1995).

'Employers Must Resist Wage Rises' (Australian Financial Review editorial, 1995).

'Average Pay Rise Dims Outlook for Inflation' (Ellis 1995).

'Wages Figures a Threat to the Inflation Target' (Mitchell 1995a).

The clear suggestion from the reports and editorials was that wage rises were excessive, that enterprise bargaining under the Accord was failing to deliver its promise of price stability (Wood 1995) and that any opportunity for a cut in interest rates had been lost because of the concern over the inflationary consequences of excessive wage increases (Ellis and Burton 1995).

When it was suggested by trade union officials that wage increases are well below the increases in executive salaries and that large increases in executive pay had established a precedent and an expectation of similar increases for the rest of the workforce (La Canna 1995) the media were quick to point out that executive wages are determined by market forces (Australian Financial Review editorial, 1995a) and they are relatively low by international standards (Clout 1995).

While the twisted logic of the print media is difficult to follow, they are generally consistent on one issue – a complete ignorance of the aggregate wage data. With some exceptions (Mitchell 1995b) they never take the time to critically assess what they are reporting, instead relying either on distorted averages that may or may not reflect actual increases in hourly wage rates or selective increases that exaggerate the extent of the average increase. Given the industrial, demographic and compositional changes that are occurring in the Australian workforce together with the shift from centralised wage determination towards enterprise bargaining it is no longer clear what average wage (earnings) increases represent.

In this paper there are five issues addressed:

- a) what do we mean by a wage?
- b) how are wage increases measured?
- c) why should we be wary in the interpretation of wage increases?

- d) how can recent wage increases be interpreted?
- e) have recent wage increases been excessive?

What Do We Mean by a Wage?

The analysis of Australian wage data has occupied a central place in applied economic research in Australia in the post 1945 period. The key issues assessed have included wage dispersion across occupations, industries and regions (Fitzgibbon 1975; Hancock and Moore 1975), the deviation between award wages of pay and earnings (earnings drift) (Hancock 1975; Isaac 1975), the relationship between wages and unemployment (Hancock Report, Vol. II, 1985; Gregory 1989; Chapman 1990; Indecs 1992, ch.3), the role of the arbitration system in wage determination (Hancock Report Vol. II, 1985) and more recently the role of the Prices and Incomes Accord in moderating real wages growth (Moore 1989; Chapman 1990; Chapman, Dowrick and Junankar 1991; Committee on Employment Opportunities, 1993, 32).

The collection and analysis of wage data can be undertaken from one of two broad perspectives: wages as an income payment for labour services and wages as a cost of production to the employing enterprise. 'Wages' not only have these rival perspectives but the term is often applied in both a specific and a generic context. In a specific context wages can be regarded as gross direct payment for the employment of labour services. In a generic sense wages can be regarded as encompassing all direct and indirect benefits paid to labour for the employment of labour services. In the generic sense wage payments are but one of a number of different types of payment accruing in return for labour services. In addition there are other non-wage costs associated with employing labour such as payroll tax payments that do not accrue directly or indirectly to labour.

As an income payment the wage can be broken down into direct and indirect benefits. The direct benefits refer to the remuneration received per period of employment. However, even this is deceptive, since from this may be deducted payments for superannuation contributions and income tax payments. Take-home pay can considerably diverge from gross pay. In turn the command over resources provided through direct labour payments requires adjustment for the effects of inflation: hence the difference between real and nominal wage payments. However, there are indirect benefits that are not reflected in the hourly or weekly gross wage, these include holiday, sickness and long-service leave entitlements. The non-wage benefits vary in number and distribution, in general there is a direct correlation between non-wage entitlements and wage payments;¹ the higher the wage the more numerous and generous the non-wage benefits and the greater the wedge between the wage return for labour services and the total payment package.

For employers the costs of labour include wage and non-wage benefits and other labour costs such as employer's superannuation contributions, payroll taxes and worker's compensation premiums. The ABS survey of Labour Costs (Catalogue 6348.0) demonstrates that earnings are around 88 percent of labour costs.² The gap between gross pay, real take-home pay, total labour payments and total labour costs can be considerable. For employers the costs of labour include not only the direct and indirect costs of employment but also the relationship between labour cost changes and changes in prices and labour productivity. For a commercial business large increases in labour costs are irrelevant if they are offset by larger increases in product prices and/or labour productivity. In this context real unit labour costs are the appropriate labour cost indicator. All this suggests that what we mean by a wage can take on several different meanings in different contexts, likewise there will be different outcomes with respect to the extent of wage increases depending upon how we define the wage concept.

What Are the Alternative Aggregate Wage Series?

Not surprisingly then there are a myriad of wage data series produced by the Australian Bureau of Statistics (ABS), reflecting the different perspectives and the different questions to which wage data is subjected. In its reporting of 'wages' the ABS has three sets of distinct data:

- a) earnings which reflects a payment to employees for labour services defined as 'remuneration in cash and in kind paid to employees, as a rule at regular intervals, for time worked or work done together with remuneration for time not worked such as for annual vacations' (ABS 1986, 1).
- b) compensation of employees which includes earnings as well as bonuses, employers contributions to superannuation schemes and termination pay.
- c) labour cost 'is based on the concept of the cost incurred by the employer in the employment of labour' (ABS 1986, 1). This includes compensation plus other on-costs including training, recruitment and payroll taxes.

There are a range of series published by the ABS that cover these above perspectives. The major ones are:

- a) award rates of pay indices: these are designed to measure the change in the minimum award rates of pay for full-time adult employees (ABS 1986, 2).
- b) average weekly earnings: where earnings is defined as above and the measure covers both full-time and part-time employees.
- c) total labour costs covers both direct compensation and other on-costs associated with the employment of labour.

However, as with most labour series, the data base is dominated by full-time employees. All series largely focus upon the income, compensation or costs related to employees, especially full-time employees. As such, the one glaring omission in the Australian data base is the complete absence of any data on the remuneration of non-employees, at best, proxy estimates can be generated through an elaborate process of interpolation combined with heroic assumptions (Covick 1986).

A review of Australian policy discussion reveals the persistent misunderstanding and mis-application of aggregate wage data, the wrong series have been applied to assess questions for which they are not appropriate.³ Too often any wage series that demonstrates wage increases in excess of the inflation rate (real wage growth), as with the current media concern over wages, is taken to be indicative of trade union push or inappropriate wage decisions by the Industrial Relations Commission (IRC) (eg Moore, 1989). Apparent real wage growth, especially where earnings series are used can be totally independent either of the decisions of the Industrial Relations Commission (IRC) or trade union action.⁴

In Table 1 the current wage data series for Australia are listed together with their source and methods of derivation. Note that the ABS is not the exclusive source for wage data, the Federal Treasury constructs a series for nominal and real unit labour costs. Up until the mid 1960s, with full employment, arbitration and the full-time, male, unionised, award covered employee dominant, the principal wage data sources included minimum rates of pay indices and male award rates of pay indices. Current use and interpretation has shifted towards the earnings and labour cost series, though the derivation and construction of the earnings series has altered considerably over the past 50 years (ABS 1986).⁵

Table 1 demonstrates the extensiveness and variety of wage data available together with the differences in their frequency of publication. There is also a variety of sources for the data including employers, employees, national accounts and the Federal IRC. The appropriateness of each series depends upon what aspects of 'wages' and what perspective of 'wages' the researcher is interested in. Recent institutional developments (discussed below) mean that the application of centralised wage determination and the importance of award wage increases across the workforce has diminished. As a result the utility of the award wage series has declined. Current practice has elevated the earnings series to the most commonly quoted series in the media for demonstrating whether the gross remuneration to employees is keeping pace with inflation and whether the increase in gross remuneration is excessive. The series on earnings distribution (Catalogue 6306.0) is applied to assess changes through time in the earnings distributional profile across industries, sectors and gender (Rimmer 1994, ch.6; McGuire 1994).

Series	Source	Focus	Construction
Average Weekly Earnings	ABS Catalogue 6302.0	Earnings	Employer based survey*; quarterly; all employees included
Distribution & Composition of Employee Earnings & Hours	ABS Catalogue 6306.0	Earnings	Employer based survey*; annual; sample of employees included
Distribution of Weekly Earnings	ABS Catalogue 6310.0	Earnings	Labour force survey supplement; household based; annual
Award Rates of Pay Index	ABS Catalogue 6312.0	Awards	Tribunal decisions; full-time adult employees; monthly; index; enterprise bargains excluded
Real Unit Labour Costs	Treasury	Labour costs	Wages, salaries and supplements per hour divided by average labour productivity per hour; national accounts based; deflated; quarterly
Labour Costs	ABS Catalogue 6348.0	Labour costs	Employer based survey; all labour costs; annual
Average Weekly Earnings	ABS Catalogue 5206.0	Earnings	National accounts; quarterly; wages, salaries and supplements per employee

What earnings series is the most appropriate? For a start, policy analysts are interested in the more timely quarterly series for providing more frequent information on earnings trends. The ABS acknowledges that the employer based surveys are more comprehensive and accurate than the series based on the labour force survey (ABS 1986).⁶ The national accounts series has larger revision adjustments, includes managerial employees, does not differentiate between full and part-time employees, and includes redundancy payments, superannuation termination payments and leave loadings. For these reasons the employer based surveys are preferred, with the quarterly survey being more comprehensive than the annual survey. As a consequence catalogue 6302.0 is the series most quoted in public discussion about earnings growth.

What Has Been the Effect of Employment Restructuring and Enterprise Bargaining on the Aggregate Wage Series?

The analysis and interpretation of wage data has become more complex as a consequence of a number of developments. First, the proportion of employees covered by awards has gradually declined over the past two decades (Lansbury and Macdonald 1995, 12). This casts doubt over the application of a wage series based on award wage movements since there are a growing number of employees located outside of the award system.⁷ Second, there have been dramatic shifts in the gender, industrial, occupational and demographic composition of the workforce. This makes it difficult to interpret series based on average earnings since earnings changes may only reflect the effects of industrial restructuring and workforce compositional changes rather than decisions of the IRC or bargains reached between trade unions and employers. The reasons for average wage changes become difficult to both identify and isolate. Third, under the Prices and Incomes Accord, non-wage increases were granted in lieu of wage increases (Gruen and Grattan 1993);⁸ hence both wage and earnings series were unlikely to completely reflect the movement in labour costs and in labour compensation.⁹ Fourth, since 1991 the wage determination system has moved from centralised determination via national wage cases towards an enterprise bargaining framework in which national wage decisions and across the board wage increases are becoming less important in securing wage increases. National determinations now form part of the safety net and only apply to those (mainly low paid) workers who are unable to secure any wage increases under enterprise bargaining. Enterprise bargained wage increases are not incorporated into the award wage series, hence the longer term relevance of such series must be questioned. As a consequence of these developments analytical attention is now focussed less on award wage increases and more on changes in average earnings and in the unit labour cost series published by the Federal Treasury.

Also of particular interest is the impact of growing non-standard employment (casual, part-time, self-employment) on Australian wage data. The growth in non-standard employment has complicated the available wage series in Australia in a number of ways. First, the major wage series are still firmly embedded in the full-time employment model supported by the arbitration system. The series for adult full-time award wages and full-time adult weekly earnings are examples of the influence of the standard full-time employment model. The discussion of wages in the Vernon Report (1965, vol.II, appendix F) dealt with the series for the minimum weekly adult male wage rate, average weekly full-time male adult earnings and earnings drift (for full-time, male adults) in the metals industries. It is only since the 1972 equal pay case and the narrowing of the male/female wage differential that the wage reference series has become full-time adult, rather than full-time male adult. However, the growth in part-time employment places some doubt over the representative nature of any wage series based on full-time employment. Such a series implicitly assumes that full-time wage increases also reflect the extent of part-time wage increases. However, the occupational and industrial distribution of full-time and part-time employees does differ, hence independently of the question of whether wage increases apply uniformly across both full and part-time employees, the compositional differences between full-time and part-time employees has to be considered. Second, Covick (1984, 1986) has demonstrated that non-employee growth complicates the interpretation of real unit labour cost data. In general the construction of unit labour cost data by the Treasury, involving as it does an assumed constant factor income share and a particular labour imputation method for self-employment,¹⁰ involves an overstatement of real unit labour costs during a cyclical downturn because of the assumptions behind the construction of the index combined with the relative growing employment share of non-employees. Third, there is the problem generated by the classification of owners of incorporated businesses as employees, to a lesser extent the same could be said of non-owning managers of incorporated businesses. Apart from the ambiguity associated with their workforce classification, there is the potential for their inclusion to overstate average earnings since managerial earnings tend to be higher than average non-managerial earnings.¹¹ Related to this, a further complication is that many non-employees are in ambiguous forms of employment

(Underhill and Kelly, 1993; Vandenheuval and Wooden, 1995) and could be surrogate employees (sub-contractors, agency workers, homeworkers) hence their exclusion from the employee population will place some doubt over the representative nature of aggregate average wage data.

In combination these above developments suggest that there has to be considerable caution exercised in interpreting the wage series and to ascribing reasons for changes in the 'average' wage.

Reasons for the Recent Growth in Average Earnings

It is not only a question of being conversant with the particular wage series that are being utilised it also requires some understanding of the potential sources for real wage increases. Average wages can increase because of one or more of the following reasons:

- a) increases in remuneration per hour
- b) average working time increases, especially over-time
- c) the profile of employees shifts towards higher average wages

Only reason (a) involves any increase in wages rates, however the reason for average wage rate increases are also varied. They could include the effects of enterprise based wage increases, the effects of safety net wage increases, the effects of bonuses and payments by results, and the effects of career progression (seniority payments). That is a combination of structural, institutional and internal forces all conspire to generate average wage increases. It can be seen that these include reasons that are independent of trade unions and the particular wage determination system. The effects of factor (b) can in part be netted out by expressing earnings on an ordinary time basis and therefore excluding the effects of over-time hours. However, this is effective only for full-time employees, for all employees the changing composition between full and part-time workers can shift average working hours.

To illustrate these forces at work we can consider the well publicised increase in average weekly earnings over the year to the June quarter 1995. It was these recorded increases that generated the previously cited concern by the media over excessive wage increases. A perusal of Table 2 will demonstrate the dispersion of earnings increases across different characteristics and why average earnings increases are so difficult to interpret.

	Males		Females			Persons			
	(1)	. (2)	(3)	(1) 🖟	(2)	(3)	(1)	(2)	(3)
all	5.2	5.3	4.4	4.2	4.1	1.7	4.8	4.8	3.1
private	6.2	6.2	5.6	5.0	4.6	2.2	5.8	5.7	4.1
public	3.8	3.8	3.0	4.3	4.4	2.7	3.8	3.8	2.5
transport	7.2	8.7	8.0	2.8	3.9	-3.3	7.4	9.5	7.5
CRS	-5.3	-5.1	-7.0	-7.4	-7.9	-18.9	-6.1	-6.1	-13.8
NSW	7.4	6.7	7.6	4.6	4.8	1.5	6.2	5.8	4.4
Tas.	2.2	2.5	1.1	3.8	3.7	-0.5	3.0	3.1	0.3

Table 2: Annual Average Percentage Increase in Average Weekly Earnings, May 1995

key: (1) full-time adult, ordinary time earnings

(2) full-time adult, total earnings

(3) all employees, total earnings

transport and storage

CRS - cultural and recreation services

Source: Australian Bureau of Statistics, Average Weekty Earnings, States and Territories May 1995 Catalogue 6302.0

From Table 2 we can observe that on average there has been no wages break-out; the increase in average weekly earnings over the year for all persons was just over three percent and well below the inflation rate of 4.5 percent. However, there are large deviations from the average (Short and Buchanan 1995, 127) and the information in Table 2 that can allow us to make a number of observations:

- a) the increase in average male ordinary time earnings is well above the increase in average ordinary time earnings for females
- b) the increase in full-time adult earnings is well above the increase in average earnings which includes part-time and junior employees
- c) there are both great variations between industries and States with respect to the increase in average earnings, for example in transport and storage adult full-time total earnings increased at double the national average, in cultural and recreation services average earnings declined for fulltime adults and for all employees.

What does all this mean? Without more specific data it is difficult to interpret the reasons for the increase in average earnings. It could reflect the effects of enterprise bargains, safety net wage increases or compositional shifts in the structure of employment (Reserve Bank 1995, 13). The circumstantial evidence would point towards earnings growth in predominantly full-time male occupations and in selected industries located in the private sector. In contrast, earnings for full-time female occupations and industries and for part-time (mainly casual) employees and junior employees would

appear to be moderate in comparison. The growing female and part-time employment share would tend to depress average earnings. While the media attention has focussed on the growth in full-time private sector earnings the growth in average private sector earnings has been below the annual average inflation rate. Moreover, there has been little consideration of the decline in average earnings in the community and recreation services sector – hardly compatible with a wages break-out.

Apart from safety net wage increases the process of wage determination is decentralised, fragmented and uneven. The ability to secure wage increases varies across occupations, industries and workplaces and is influenced by such factors as unionisation, industry concentration and the bargaining infrastructure. The timing of wage increases in the absence of national determinations will vary across industries and enterprises. Where an industry wage determination is achieved that will increase average earnings for that industry in that quarter, the configuration of wage increases across industries will be one influence on the behaviour of earnings.

Very little is known about the extent of earnings increases secured under enterprise bargaining, since many bargains may be unregistered and others may be secured under State jurisdiction, it is difficult to keep track of the extent of wage increases secured through enterprise bargaining. In its review of the increase in average earnings over the year to May 1995 the Reserve Bank (1995, 13) noted that the increase reflected:

- a) the effects of wage bargaining outcomes in specific industries, especially manufacturing and transport and storage (male, full-time employee based)
- b) the changing workforce composition with the shift towards the employment of part-time, casual and junior employees deflating average earnings growth relative to full-time adult earnings growth.

In this context anecdotal and survey evidence becomes the basis for assessing the extent of earnings increases secured under enterprise bargaining. The LIN data base published by the ACTU demonstrates a very uneven workforce coverage by industry and through time. Moreover of the 3647 enterprise agreements included on the data base 48 percent are located in the manufacturing sector and 13 percent in the transport and storage sector. This suggests that enterprise bargaining is proceeding in selected sectors characterised by male, full-time and unionised workforces. This further suggests that those who have expressed concern over the equity implications of enterprise bargaining (Henry and Franzway 1993, 138; Rimmer 1994, 39; Meade 1995), especially for females and/or part-time employees, have a sound basis for these concerns.

Have Recent Earnings Increases Been Excessive?

Apart from private sector male employees and selected industries (eg transport), real earnings have declined for males and females, full-time employees and all employees. The cited evidence of a wages break-out is very selectively located. All other national wage and labour cost indicators (see Table 3) point towards moderation over the year to June 1995. The list of data included in Table 3 confirms the difficulty in interpreting average aggregate wage movements. Award earnings increases largely reflect the effects of safety net increases; hence there is more uniformity across both gender and regions in comparison to the average earnings series. However, awards do not include enterprise bargained wage increases and they apply only to full-time adult employees. The national accounts estimate for earnings is also below the employer based survey estimates. However, it is affected by the uneven distribution of one-off payments including superannuation and other termination payments. The real unit labour cost series indicates no change over the year, suggesting that average wage increases have not been excessive relative to price and productivity increases. The Labour Force Survey earnings data (catalogue 6310.0.40.001) is only issued annually, is from the labour force survey (not employer based) and refers to increases over the year to August. It also reveals higher average increases for males and for full-time employees and total average earnings increases below the inflation rate.

In contrast the sample of enterprise agreements on the ACTU LIN data base for the March quarter suggests large average wage settlements. However, data bases of enterprise bargains such as the LIN are difficult to interpret since they incorporate only a limited number of federally registered enterprise deals that are invariably located across a limited number of industries. The recorded wage increases apply to agreements of different duration and as a result of the increasing length of agreements the actual wage increase per agreement exceeds the annualised wage increase per agreement (see Table 3). In addition the average increase per agreement will differ from the weighted average increase per agreement after accounting for differences in the number of employees covered by each agreement. The agreed wage increases may be partially the result of 'trade-offs' in other conditions, hence the extent of earnings increase may be more or less than the negotiated increase in wages under each agreement.

Full-time Weekly Adult A	Awards (to June)				
male	female	persons			
1.3	1.7	1.5			
NSW					
1.0	1.9	1.3			
Tasmania					
1.8	1.6	1.3			
Average Weekly Earnings, National Accounts (to June)					
total	1.9				
Real Unit Labour Costs,	Treasury (to June)				
total	0.0				
Weekly Earnings of Emp	ployees (to August)				
all males	full-time	part-time			
3.2	4.5	-2.0			
all females	full-time	part-time			
2.5	2.7	2.6			
persons	full-time	part-time			
1.2	3.9	1.3			
Average Wage Increases LIN data base March quarter agreements					
unweighted	7.06	•			
weighted	6.74				
annual average					
unweighted	5.16				
weighted	5.55				

Table 3: Annual Percentage Wage Increases as Measured by Other Indicators

Source: Australian Bureau of Statistics, Award Rates of Pay Index, Catalogue 6312.0.

Federal Treasury (1995), Economic Roundup, Spring.

Labour Information Network (LIN) Quarterly Bulletin, August 1995.

Australian Bureau of Statistics, Weekly Earnings of Employees, Catalogue 6310.0.04.001

Given the sector, gender, full-time and industry specificity of recent earnings increases a number of important questions follow:

- a) since earnings increases are above the inflation rate in the private sector and in specific industries does this suggest that private sector wage deals should be subject to some centralised regulation and capping?
- b) should there be some consideration for the possibility that earnings increases were secured in part in response to past or prospective productivity increases? Under enterprise bargaining it should be expected that cross industry labour market conditions and productivity growth rates do differ, hence negotiated wage increases will for some industries be above national average inflation and productivity growth rates.
- c) to what extent can females, part-time and junior employees participate in the enterprise based wage determination system on an equal basis with male, full-time, private sector employees? The same observation applies

to public sector employees who are faced with tenuous productivity indicators and a climate of cost savings.

d) to what extent is enterprise bargaining increasing earnings inequality across the workforce?

The Usefulness of Current Wage Series

Aggregate wage series require careful evaluation and analysis before being interpreted. Short and Buchanan (1995, 130) are quite correct in complaining about the apparent poor understanding of the implications of and operations of the enterprise based wage determination system. Selective industry agreement settlements are being seized upon as if they were settlements that were granted under a centralised wage system and subsequently will be passed on to all workers.¹² The media are either stuck in a centralised wage determination mindset or they are being very selective in their reporting of the aggregate earnings data.

Clearly the award based series have limited application in their workforce coverage. Employee enumerated series are regarded as being of less accuracy than employer enumerated series. The national accounts earnings series is susceptible to the uneven process of redundancy and retirement. The Treasury series is an amalgam of different influences of which earnings is only one component. If we are interested in the trends in enterprise bargaining, the earnings series not only reflect bargaining outcomes but are also sensitive to structural and compositional changes in the workforce.

With the shift towards a decentralised wages system there will be greater variation in the content, extent of change and in the duration of bargains across industries and enterprises than in the past. Also there will be greater dispersion in the range of bargained increases. In this context there will be extensive deviations from the average. Those who wish to find evidence of 'excessive' wage increases either relative to the average increase or to the inflation rate should have no trouble in finding such evidence. However, they should also report the dramatic decline in average earnings across selected industries and the even more dramatic examples of declining real earnings in order to present the full range of variable outcomes that are being observed within the average earnings series. Moreover, there should be some recognition that the dramatic and constantly changing composition of the workforce is also influencing the movement in the average and compounding the problems of interpretation.

Notes

1. From ABS Employment Benefits, Catalogue 6334.0 (1992), the relationship between selected non-wage benefits and earnings is as follows:

Denem	i ercentage with Denent noni	
	Bottom 10%	Top 10%
Club fees	1.0	9.0
Entertainment	0.3	11.2
Shares	2.8	10.4
Transport	17.4	50.2
Long-service	50.3	84.5

2. The percentage division of total labour costs for 1993/94 is as follows:

earnings	88.4
superannuation	5.6
payroll tax	3.5
workers compensation	1.8
fringe benefits tax	0.7
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Between 1991/92 and 1993/94 average earnings increased by 5.7 percent while superannuation costs increased by 20.2 percent and fringe benefit tax payments increased by 9.6 percent (ABS, Catalogue 6348.0).

- 3. An example is the linking of (excessive) wage increases by the Federal Industrial Relations Commission (IRC) to growing unemployment. Henderson (1985) in his critique of the Industrial Relations 'Club' follows this argument but uses the series for average weekly (full-time, adult) earnings growth to demonstrate the link. However, the growth in average weekly earnings can be totally independent of any IRC national wage case decision. A more appropriate series to demonstrate his argument would have been the growth in full-time adult award rates of pay.
- 4. Real average weekly earnings could increase with constant award and overaward payments as a result of:

a) an average increase in working hours as a consequence of more over-time b) a change in the industrial or occupational composition of the workforce towards higher paying industries and occupations

- c) a fall in the CPI as a result of say interest rate reductions or exchange rate appreciation
- d) an increase in payment by result payments
- 5. The average weekly earnings series dates from 1941. Originally the series was derived from payroll tax returns for full-time male employment. In constructing historical average earnings series account has to be made for the shift from payroll tax returns to employer surveys (1981), the equal pay decision of 1972 and the subsequent narrowing of the male-female earnings differential. For discussion of derivation and historical development see ABS (Catalogue 6350.0, 1992).
- 6. The employer based survey:
 - a) is based on evidence rather than recall

b) provides more accurate data on the composition of earnings by occupation and industry (ABS 1986, 53).

7. Between 1974 and 1990 the proportion of employees covered by awards, determinations and agreements declined from 88 to 80 percent. Subsequent State government legislation (eg Victoria, Western Australia) moved towards the

abolition of awards and hence the extent of award coverage is now likely to be much lower than 80 percent.

- 8. The major non-wage decision was the extension of occupational superannuation (Accord Mk III, 1986).
- This becomes even more complicated if social wage aspects of the Accord are considered eg the commitment to a universal health care system.
- 10. Following Covick (1984), let average labour productivity (ALP) be equal to real GDP per hour of labour input:

(1) ALP = GDP/(p.E.h) where p is the GDP deflator, E is total employment and h is the average number of hours worked per period.

(2) w = WS/(p.Ee.he) the average real wage per hour for employees (w) is equal to total wages/salaries /supplements(WS) divided by the price deflator (p) times the total hours worked by employees (total employees (Ee) times average hours worked per period by employees (he)).

Real unit labour costs (RULC) is the real average wage divided by average labour productivity:

(3) RULC = w/ALP = (WS/GDP). [(E.H)/(Ee.he)]

Given the following assumptions: if WS is returned to labour, the gross operating surplus of incorporated trading enterprises is returned to property, and the gross operating surplus of unincorporated enterprises is apportioned to non-employees (at the average hourly wage rate for employees) and the residual to property income, then total labour income (LY) is:

(4) LY = Ws + (Ws/Ee.he).En.hn where En is the number of non-employees (E-Ee) and hn is the average hours worked per period by non-employees. This can be re-arranged to:

(5) L/GDP = (WS/GDP).[(E.h)/Ee.he)]

This is the same as RULC outlined in (3). Covick went on to demonstrate that the labour imputation assumptions underpinning the RULC calculations led to incongruous results, especially the negative property unincorporated property income for 1973/74-1981/82 (Covick 1984, 326). The major source of RULC increases (and real wage 'overhang') for this period was the relative increase in the self-employment workforce share (ie variations in Ee/E).

- 11. Average adult full-time managerial earnings are approximately 50 percent higher than average full-time ordinary non-managerial earnings. While the earnings levels substantially differ, the growth rates are similar. For the 1987-1992 period managerial full-time adult earnings increased by 32 percent while ordinary time full-time non-managerial adult earnings increased by 33 percent.
- 12. Short and Buchanan (1995, 130) sight the example of the media and finance sector economists response to the 15 percent wage by the Transport Workers Union in 1994: 'few of these commentators grasped the significance of the new legislative framework for decoupling developments in collective bargaining from arbitrated awards, thereby limiting the ability of a few key wage settlements to set a wage norm for awards'.

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